

fhicl-cpp - Bug #24659

Validated configuration that used to work in art v3_05_01 no longer works in v3_06_01

07/23/2020 12:58 PM - Rob Kutschke

| | | | |
|--|---------------|------------------------|------------|
| Status: | Closed | Start date: | 07/23/2020 |
| Priority: | High | Due date: | |
| Assignee: | Kyle Knoepfel | % Done: | 100% |
| Category: | | Estimated time: | 0.00 hour |
| Target version: | 3.06.02 | Spent time: | 5.00 hours |
| Description | | | |
| <p>The description below is using art v3_06_01. I can't tell if our problem is that we are not using the tools correctly or if there is another bug.</p> <p>Our configuration for G4 is declared in the file:</p> <p>https://github.com/Mu2e/Offline/blob/master/Mu2eG4/inc/Mu2eG4Config.hh</p> <p>In this test job https://github.com/Mu2e/Offline/blob/master/Mu2eG4/fcl/g4test_03.fcl, one of the optional parameters is not present and our code throws an exception when it tries to test for the presence of that parameter.</p> <p>The optional parameter is named minRangeRegionCuts and is declared in:</p> <p>https://github.com/Mu2e/Offline/blob/c10e885f8b1f0fa216411e24b929ffe8fe9005c2/Mu2eG4/inc/Mu2eG4Config.hh#L143</p> <p>The code that does the test is:</p> <p>https://github.com/Mu2e/Offline/blob/c10e885f8b1f0fa216411e24b929ffe8fe9005c2/Mu2eG4/src/Mu2eWorld.cc#L271</p> <p>As best I can tell the exception is thrown when computing the expression inside the if. The error message is:</p> <pre>%MSG-s ArtException: PostEndJob 23-Jul-2020 12:34:45 CDT ModuleEndJob ---- EventProcessorFailure BEGIN EventProcessor: an exception occurred during current event processing ---- ScheduleExecutionFailure BEGIN Path: ProcessingStopped. ---- Can't find key BEGIN physics The above exception was thrown while processing module Mu2eG4/g4run run: 1 ---- Can't find key END Exception going through path p1 ---- ScheduleExecutionFailure END ---- EventProcessorFailure END %MSG</pre> | | | |

History

#1 - 07/23/2020 08:32 PM - Kyle Knoepfel

- Assignee set to Kyle Knoepfel
- Status changed from New to Assigned
- Category set to Infrastructure

#2 - 07/24/2020 10:52 AM - Kyle Knoepfel

I have created a minimal reproducer. The problem manifests itself whenever an optional delegated parameter has not been supplied in the configuration. In your case, the physics.minRangeRegionCuts optional delegated parameter is not supplied in the configuration, and the error is triggered.

Investigating.

#3 - 07/24/2020 12:50 PM - Kyle Knoepfel

- *Scope deleted (Internal)*
- *% Done changed from 0 to 100*
- *Status changed from Assigned to Resolved*
- *Category deleted (Infrastructure)*
- *Project changed from art to fhicl-cpp*
- *Experiment deleted (Mu2e)*

The problem is understood. Whenever a ParameterSet-navigation bug was fixed in commit [fhicl-cpp:82c084f](#) (after the release of art 3.05.01), it exposed a weakness in the handling of absent optional delegated parameters, which had "accidentally" worked before. The implementation has been corrected, and a bug-fix release of fhicl-cpp (and downstream products) will be released.

Implemented with commit [fhicl-cpp:3f12eb3](#).

#4 - 07/24/2020 03:32 PM - Kyle Knoepfel

- *Target version set to 3.06.02*

#5 - 07/27/2020 10:21 AM - Kyle Knoepfel

- *Status changed from Resolved to Closed*